3-2004

Update - March 2004

Loma Linda University Center for Christian Bioethics

Loma Linda University Center for Christian Bioethics

Update

Volume 19, Number 1 (March 2004)

Christians Contemplating New Developments in Biomedicine

Anthony J. Zuccarelli, PhD
Executive associate dean, Graduate School
Loma Linda University

Bioethics is based on ideals about how scientists and physicians should behave in clinical and research settings. The principles of ethics are expressions of values held widely in society. Those values are derived from its predominant religious traditions. The public conscience has been educated by, and probably owes its existence to, the values of people of faith.

Public bioethics is distinct from religious ethics. A pluralistic society cannot accommodate all of the metaphysical conceptions of the faith communities within it. Public policy cannot reflect all aspects of our personal moral doctrines, but it should fit the conscientious beliefs that we have in common. It would be difficult to reach consensus about contentious biomedical issues without understanding the convictions of people of faith.

My interest in how religious groups have responded to advances in biomedicine dates to an ethics conference in 1999. Seven invited speakers from different backgrounds and professions discussed "The Ethics of Human Cloning." I could not have predicted the speakers' opinions from their biographical sketches. Two speakers thought that it might never be ethically justifiable to use somatic cell nuclear transfer for human reproduction. Both dissenters were Seventh-day Adventists—and I was one of them. It led me to ask, "How does one's philosophical world view and faith tradition influence one's response to biomedical innovation?"

I am indebted to Dr. John Brunt for pointing out that statements published by church groups would be a reasonable way to determine the groups' positions. Dr. Brunt found that denominational statements fell into three categories: *opposition to human cloning as inherently wrong* because it violates fundamental beliefs, *permanent opposition to human cloning* on pragmatic grounds and *opposition to human cloning at present*, but with the possibility that it might be useful in the future, if it were to meet particular conditions.

Categorical rejection of human cloning was expressed by the Southern Baptists, the Roman Catholic bishops, the Church of Scotland, and the Lutheran Church, Missouri Synod. These statements included, "Seeking to clone human beings signifies a spiritual and technological hubris on the part of man which aims to usurp God's prerogatives as Creator," and there "are no morally acceptable reasons for cloning human beings," that human cloning is rejected because it "is not a worthy way to bring a human being into the world" and that it "would be ethically unacceptable as a matter of principle."

Several statements rejected cloning on pragmatic grounds, like the United Church of Christ. It affirms the work of science and recognizes situations where cloning might be beneficial, but rejects it for three practical reasons: the health risks it poses, the overwhelming burden of expectations experienced by the child, and the absence of a genetic contribution from two adults.

Please turn to page 3

Editorial

Diana Fritz-Cates, PhD, stands out among scholars of ethics in this country. Her work in the conceptual development of the Care ethic is of particular importance. As her article here notes, explicit concern for the religious impulse of patients is an essential element of the Care ethic. Yet concern for patient religious impulse should not be limited to an ethic of care. Regardless of what method of ethics we may or may not advocate in clinical medicine today, we would do well to pay attention to patient religious impulse.

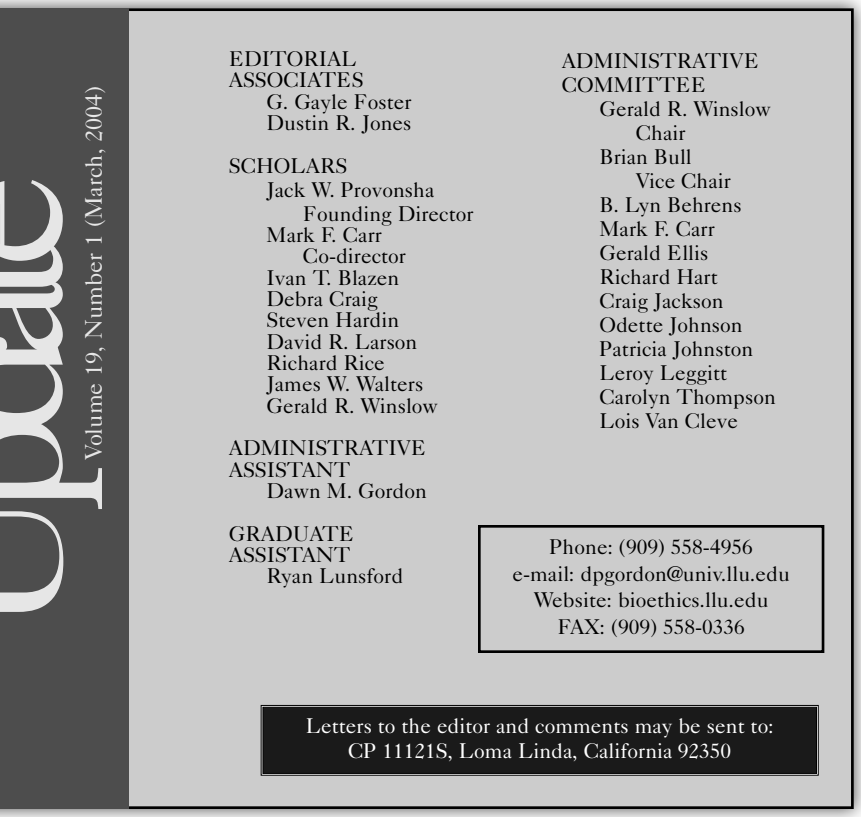
Anthony Zuccarelli, PhD, shared a brief survey of Christian responses to the astounding new developments in biomedicine with our 2003 conference attendees. We include his talk in this issue.

Some time ago the General Conference of Seventh-day Adventists' offered some conceptual guidance in the area of ethics as it applies to the new genetics. Two statements are included in this issue: The statement, *Christian Principles of Genetic Interventions* was generated by the Christian View of Human Life committee and was approved by the General Conference administrative committee in 1995. The statement on *Ethical Considerations Regarding Human Cloning* was approved by the General Conference executive committee in Iguacu Falls, Brazil in 1998. My question to you is: Should the General Conference of Seventh-day Adventists revisit the issues of modern genetics or do these statements continue to serve us well?

Finally, I am pleased to report that our yearly Contributor's Convocation held November 1, 2003, was a wonderful gathering. The Convocation was dedicated to having a socially enjoyable time in the context of mentally stimulating talks. Success was had on both counts! Richard Hart, MD, DrPH, chancellor of Loma Linda University, presented a vision for the future of the University as we seek to respond to requests from around the world for our help in educational and health-care projects. At the time of his talk there were fifteen requests for help in developing educational programs for nursing, three requests for developing medical schools, and two requests for help in developing dental schools; just to name a few. Requests have come from China, Russia, Afghanistan, India, Syria, and all across the continent of Africa.

Dr. Hart noted five of the most significant ethical questions that we face as we seek to respond to such requests. First, the *ethics of access* calls us to respond with care for those in poverty. Should we simply develop programs and health clinics where relatively wealthy people can pay for services or should our efforts to serve the poor push us toward a more balanced approach? Second, the *ethics of integrity* calls for us to maintain academic and theological standards in areas of the world where such standards either don't exist or are radically different from our own. Third, the *ethics of quality* demands that we enter into real consideration of the cultures in which we will serve regarding issues of quality control. Fourth, the *ethics of the Sabbath* will push us to realize that we may well have standards that are more relaxed than those in the missionary cultures to which we will go. Our need for sensitivity to the pains with which various other cultures have sought to make a place for Sabbath observance is essential to our involvement. Finally, the *ethics of culture* will force us to examine and rethink many of our own positions, which may be more culturally bound than theologically supported.

Those who were able to attend the Convocation thoroughly enjoyed it. Let me encourage you to join us for this year's Contributor's Convocation on November 6, 2004. All of our contributors are listed in this issue of UPDATE. We are thankful for every one!



Mark F. Carr, PhD, MDiv
Co-director, Center for Christian Bioethics

Update
Volume 19, Number 1 (March, 2004)

Phone: (909) 558-4956
e-mail: dpgordon@univ.llu.edu
Website: bioethics.llu.edu
FAX: (909) 558-0336

Letters to the editor and comments may be sent to:
CP 11121S, Loma Linda, California 92350

Christians Contemplating New Developments in Biomedicine, continued…

Few denominational statements allow for the possibility of human cloning in the future. The Genetic Science Task Force of the United Methodist Church opposed cloning at present, but urged that if cloning is ever accomplished, cloned individuals must be treated with dignity and accorded the same civil rights available to others. The statement recommends "widespread discussion of issues related to cloning." This position was later abrogated by the United Methodist Church General Conference which opposed human cloning because it would cause destruction of human embryos, result in the exploitation of women, undermine the family, compromise human distinctiveness, lessen genetic diversity, encourage exploitation for personal gain, and sacrifice personal privacy.

A statement from the Seventh-day Adventists ruled out the use of cloning at present because of concerns about physical harm to developing human lives, threats to personal dignity and uniqueness, damage to family relationships, the possibility of commodifying human clones, and cost. Nevertheless, they were open to the possibility of using cloning "to meet genuine human needs." Their statements listed seven principles that should be considered before this technology is applied to humans, including protection of vulnerable human life and dignity, alleviation of human suffering, protection of the family structure, financial considerations, accurately communicating the health risks, and the value of understanding creation and ourselves.

Many religious groups are deliberate in responding to contentious medical and scientific issues. This is reflected in the long response times to recent technologies: embryonic stem cells and therapeutic cloning. Several religious groups have not yet publically responded: the Unitarian-Universalist Association, the Evangelical Lutheran Church of America, and the Church of Jesus Christ of Latter-day Saints.

Several religious groups have taken qualified positions that generally favor embryo research and embryonic stem cells, including the Presbyterian Church USA, the United Church of Christ and Reform Jews. A statement from the United Synagogues of Conservative Judaism is frankly positive.

Many church groups vigorously oppose research involving embryos and embryonic stem cells, including the Southern Baptist, the Roman Catholic Church, the Episcopalian Church USA, the Lutheran Church, Missouri Synod and the United Methodist Church.

Statements opposing embryo research often take the position that the fertilized egg is morally equivalent to an adult person, but they also refer to other values: playing God; lack of respect for the sanctity of life, human dignity and uniqueness; the disproportionate burden placed on women; inappropriate use of financial resources; and exacerbation of social inequalities.

Many religious groups make categorical statements that are not adequately explained. Religious tradition and historical positions are sometimes cited as justification. The current position of the Roman Catholic Church represents a change from its historical position. Before 1869 an early embryo was not considered to have a soul until quickening.

In contrast to most religious groups, spokesmen from the biotechnology industry are Promethean and impatient with ethical restraints on embryo research and embryonic stem cells.

Public policy cannot succeed if it violates the moral sensitivities of its most influential religious groups. More restraint, sensitivity and prudence is necessary on both sides. ■

Anthony J. Zuccarelli, PhD, *serves as executive associate dean in the Graduate School at Loma Linda University. In addition, Dr. Zuccarelli is also a professor in the department of microbiology and molecular genetics in the School of Medicine.*

Christian Principles of Genetic Intervention

This recommendation was voted by the Christian View of Human Life committee at Pine Springs Ranch, California, March 26–28, 1995.

This document was voted by the General Conference of Seventh-day Adventists administrative committee (ADCOM), Silver Spring, Maryland, June 13, 1995.

Most of the new developments in genetics are the result of increased knowledge concerning the fundamental structure of genes, not only in humans but throughout all the realms of life on earth. Among these developments are genetic mapping, new means for genetic testing, new possibilities for genetic engineering, and a variety of eugenic strategies that would have been unimaginable only a few years ago. In short, new genetic knowledge has produced unprecedented power. With that power has come the potential for immense good or harm. And with such great power also comes great responsibility. From the standpoint of the Christian faith, we are accountable for

Please turn to page 4

the use of this power not only to global humanity, but also to every realm of created life that God has entrusted to our stewardship. Ultimately we are accountable to the Maker of the universe who holds us responsible for the care of each other and of the earth.

When creation came forth from the Creator's hand it was "very good." (Gen. 1:31) The genetic endowment which Adam and Eve received from their Creator was without defects. The genetic diseases from which humans now suffer are not the result of normal variation. They have developed through harmful mutation. In restoring the human genome to a healthier condition, modern science may attempt to recover more of creation's original condition. To the extent that helpful genetic interventions can be conducted in harmony with Christian principles, they are to be welcomed as cooperation with the divine intention of alleviating the painful results of sin.

Any attempt to state comprehensive principles of ethics for genetic interventions must confront the complexities of a rapidly changing field of science. Since the discovery of the molecular structure of DNA (deoxyribonucleic acid), knowledge of genetics across an ever wider range of life forms has burgeoned.

Many of the increases in information and technological ability have been accompanied by significant ethical concerns. We can only begin to imagine future questions that will arise as genetic science progresses. The complexity of the issues and the pace of change make it likely that statements of relevant Christian principles will require expansion and modification as time passes.

One example of an area of rapid change is genetic mapping. An international, scientific effort known as the Human Genome Project is attempting to construct a detailed genetic chart, or "map," of all the human chromosomes. The goal is to provide a comprehensive description of the sequence of the millions of DNA base pairs which human chromosomes contain. Researchers plan to use this information to facilitate the identification and isolation of human genes, thereby providing a helpful aid in understanding human development and in treating human diseases. New details about the identity, role, and function of human genes are continually emerging.

Increased knowledge about the identity of human genes has given rise to a variety of new possibilities for genetic testing. In the past, genetic information about an individual was largely inferred from the person's family history or clinical observations of the person's phenotype, or physical expressions of a person's genes. Today, a growing number of sophisticated genetic analyses make it possible to identify defective genes that cause genetic diseases such as cystic fibrosis, Huntington's Chorea, and some types of cancer. Many of these tests can now be performed prenatally. The potential exists for identifying hundreds of genetic characteristics, including a wide range of genetic disorders.

A further result of basic genetic knowledge is the capacity to alter genes intentionally, or genetic engineering. Through the use of enzymes which are able to excise specific segments of genes, it is possible to change the genetic makeup of cells by deliberately inserting, removing, or changing specific genes. Genetic engineering presents astonishing new possibilities, including the transfer of genes across biological boundaries, such as from animals to plants. The potential for improving life forms seems endless. Genetically engineered plants, for example, can be made more productive, more resistant to diseases, or less susceptible to internal processes of decay.

Genetic engineering has directly benefitted human medicine. It has made possible, for example, the production of human insulin and human growth factor, neither of which was previously obtainable in sufficient quantities. Genetic engineering also makes it possible to treat diseases through genetic alteration. With this type of treatment, a patient whose cells have missing or defective genes receives needed genetic material. No one knows how many genetic diseases may eventually be treated in this way, but initial successes with diseases such as cystic fibrosis give hope that other genetic disorders may be treatable.

Increased genetic knowledge also produces new possibilities for eugenics, or endeavors to improve the gene pool of various species, including human beings. In broad terms, such attempts fall into two categories. Negative eugenics uses strategies whose goal is to prevent harmful genes from being inherited. Positive eugenics uses strategies whose goal is to promote the transmission of desirable genes. An example of negative eugenics, common in the past, is the sterilization of individuals considered to have defective genes capable of being inherited. An example of positive eugenics is artificial insemination by donors who have been selected for traits, such as high intelligence, that are deemed desirable.

Ethical concerns

In order to provide focus, it is helpful to consider a sampling of current ethical concerns for which we seek to state Christian principles. These concerns can be placed in four basic categories: the sanctity of human life, the protection of human dignity, the acceptance of social responsibilities, and the safekeeping of God's creation.

Sanctity of human life. If genetic determinism reduces the meaning of humanhood to the mechanistic outworkings of molecular biology, there is serious potential for devaluing human life. For example, new capacities for prenatal genetic

Please turn to page 5

testing, including the examination of human pre-embryos prior to implantation, generate questions about the value of human life when it is genetically defective. How serious must a genetic defect, prenatally diagnosed, be before it is an ethically legitimate reason for discarding a pre-embryo or for inducing an abortion? Some conditions, such as trisomy 18, are generally deemed incompatible with life. But the relative seriousness of most genetic defects is a matter of judgment.

Protection of human dignity. The protection of personal privacy and confidentiality is one of the major concerns associated with the new possibilities for genetic testing. Knowledge about a person's genetic profile could be of significant value to a potential employers, insurance companies, and to those related to the person. Whether genetic testing should be voluntary or mandatory, when and by whom the testing should be done, how much and with whom the resulting information should be shared are matters of significant ethical concern. Difficult decisions must be made about whether there are exceptions to the usual expectation of confidentiality and privacy when persons may suffer considerable harm because of a lack of information. At stake is the protection of persons from stigma and unfair discrimination on the basis of their genetic makeup.

"What are the implications for the meaning of being human if interventions aimed at enhancing human intelligence or physique become available?"

Another cluster of concerns related to human dignity stems from the possibility of intentionally altering the human gene pool. Medical interventions for genetic diseases may be aimed at the treatment of bodily cells that are genetically defective or at the alteration of reproductive cells. Changes in human reproductive cells could become a permanent part of the human gene pool. Interventions may also extend beyond the treatment of disease and include attempts to enhance what have formerly been considered normal human characteristics. What are the implications for the meaning of being human, for example, if interventions aimed at enhancing human intelligence or physique become available?

Acceptance of social responsibilities. The power that results from new genetic knowledge also raises concerns about the ethics of social responsibilities. For example, should society develop policies designed to encourage either positive or negative eugenics? Should individuals with serious genetic disorders be given full procreative liberty? Another area of social concern has to do with the use of society's resources. Questions can be raised about the amount of social resources that should be spent for interventions in human genetics when more basic health care is not fully available. Other questions arise concerning the distribution of the benefits and burdens of genetic interventions and how they will be shared by rich and poor within society.

Stewardship of God's creation. As the powers of genetic engineering are further developed, many changes could be made in various species that inhabit the earth. These changes have the potential for being both permanent and, to some degree, unpredictable. What limits to genetic change, if any, should be accepted? Are there boundaries that should not be crossed in transferring genes from one life form to another? We may hope that genetic changes are intended to enhance life on our planet.

But there are reasons for concern. For example, consideration has already been given to genetic alterations for the purpose of developing new biological weapons. The exploitation of other life forms for purposes of military security or economic gain should call forth careful, moral scrutiny.

It is with ethical concerns like these in mind that we state the following Christian principles for genetic interventions.

Principles

1. *Confidentiality.* Christian love requires that trust be maintained in human relationships. The protection of confidentiality is essential to such trust. In order to safeguard personal privacy and protect against unfair discrimination, information about a person's genetic constitution should be kept confidential unless the person elects to share the knowledge with others. In cases where others may suffer serious and avoidable harm without genetic information about another person, there is a moral obligation to share the needed information (Matt. 7:12, Phil. 2:4).

2. *Truthfulness.* The Christian obligation to be truthful requires that the results of genetic testing be honestly reported to the person tested or to responsible family members if the person is incapable of understanding the information (Eph. 4:25).

3. *Honoring God's image.* In all of God's creation, only human beings were created in the image of God (Gen. 1:26, 27). The Christian acknowledgment of God's wisdom and power in creation should lead to caution in attempts to alter permanently the human gene pool (Gen. 1:31). Given current knowledge, genetic interventions in humans should be limited to treatment of individuals with genetic disorders (somatic cell thera-

Please turn to page 6

pies) and should not include attempts to change human reproductive cells (germ cell alterations) that could affect the image of God in future generations. All interventions in human beings for genetic reasons should be taken with great moral caution and with appropriate protection of human life at all states of its development.

4. *Prevention of suffering.* It is a Christian responsibility to prevent or relieve suffering whenever possible (Acts 10:38, Luke 9:2). For this reason the primary purpose of human genetic intervention should be the treatment or prevention of disease and the alleviation of pain and suffering. Because of the tendencies of sinful human nature, the possibility of abuse, and unknown biological risks, attempts to modify physical or mental characteristics with genetic interventions for healthy persons who are free of genetic disorders should be approached with great caution.

5. *Freedom of choice*. God values human freedom and rejects the way of coercion. People who are capable of making their own decisions should be free to decide whether or not to be tested genetically. They should also be free to decide how to act on information that results from testing, except when others may suffer serious and avoidable harm. It may be the morally responsible choice to avoid known risks of serious congenital defects by forgoing procreation. While such decisions about procreation and genetic testing are deeply personal, they should be made by the individual with due consideration for the common good.

6. *Stewardship of creation*. Safeguarding God's creation includes esteem for the diversity and ecological balance of the natural world with its countless species of living creatures (Gen. 1). Genetic interventions with plants and animals should show respect for the rich variety of life forms. Exploitations and manipulations that would destroy natural balance or degrade God's created world should be prohibited.

7. *Nonviolence*. Using genetic manipulation to develop means of warfare is a direct affront to Christian values of peace and life. It is morally unacceptable to abuse God's creation by changing life forms into weapons of destruction (Rev. 11:18).

8. *Fairness*. God loves all human beings, regardless of their perceived social status (Acts 10:34). The benefits of genetic research should be accessible to people in need without unfair discrimination.

9. *Human dignity*. Created in God's image, human beings are more than the sum of their genes (Gen. 1:27; Acts 17:28). Human dignity should not be reduced to genetic mechanisms. People should be treated with dignity and respect for their individual qualities, and not be stereotyped on the basis of their genetic heritage.

10. *Healthfulness*. Christians have a responsibility to maintain the health of their bodies, including their genetic health (1 Cor. 10:31). This means that Christians should avoid that which is likely to be genetically destructive to themselves or to their children, such as drug abuse and excessive radiation. ■

Statement on Ethical Considerations Regarding Human Cloning

This statement was voted during the Annual Council of the General Conference executive committee on Sunday, September 27, 1998, in Iguacu Falls, Brazil.

For a number of decades, the prospect that new members of the human family might be produced by cloning was considered farfetched. Recent advances in genetic and reproductive biology, however, indicate that techniques for cloning humans may soon be developed. With this prospect comes the Christian responsibility to address profound ethical issues associated with human cloning. As Christians, with firm belief in God's creative and redemptive power, Seventh-day Adventists accept the responsibility to enunciate ethical principles that emerge from their faith commitments.

Cloning includes all those processes by which living plants or animals are replicated by asexual means and methods that do not involve the fusion of egg and sperm. Many natural processes are forms of cloning. For example, microorganisms, like common yeast, reproduce by splitting into two daughter cells that are clones of the parent cell and each other. Cutting a twig from a rose bush or grapevine and propagating it into a complete plant also creates a clone of the original plant. Similarly, many simple animals, such as starfish, can regenerate complete organisms from small parts of a predecessor. Thus the biological principle of cloning is not new.

The new technique is known as somatic cell nuclear transfer. The essence of this method is to take a cell from an existing individual and manipulate it so that it behaves like an embryonic cell. Given the proper conditions, an embryonic cell can proliferate and generate a complete individual. At present, this cellular reprogramming is accomplished by putting a complete adult cell inside a larger egg cell whose nucleus has been removed. The egg that is used in this process serves the role of an incubator, providing an essential

Please turn to page 7

environment to reactivate genes of the adult cell. The egg contributes to the offspring only the small amount of genetic material associated with its cytoplasm, not its nuclear genetic material, as occurs in sexual reproduction. The altered egg must then be implanted in an adult female for gestation.

Biologists have developed this technique as a tool for animal husbandry. By this means, they hope to create a herd of valued animals that are genetically identical to a selected individual. The potential benefits from this technology, including the expectation of products for treating human diseases, are of great interest to researchers and to the biotechnology industry. However, the same technological capacity could be used for human reproduction and thus raises serious ethical concerns.

First among these concerns is medical safety. If the current technique of somatic cell nuclear transfer were to be used in humans, ova would need to be obtained from donors. Most of these would perish because of cellular manipulations during early embryonic growth in the laboratory. Others would be lost after implantation, spontaneously aborted at various stages of fetal development. In this respect, sensitivity to the value of embryonic and fetal life would be similar to the development of other methods of assisted reproduction, such as in vitro fertilization. There would likely be an increased risk of birth defects in children brought to term. At present, concern about physical harm to developing human lives is sufficient to rule out the use of this technology.

"Do existing persons have the right to exercise such a level of control over the genetic destiny of a new individual?"

However, even if the success rates of cloning were to improve and the medical risks were diminished, a number of major concerns would remain. For example, is there anything intrinsically problematic with creating an individual who is not produced through fertilization of an egg by a sperm? Further study is needed to resolve questions regarding the essential nature of procreation in God's design.

Another of the most often expressed concerns is that the dignity and uniqueness of a cloned person may be jeopardized. This risk includes the psychological harm that might be experienced by an individual who would be what some have called the "delayed identical twin" of the individual who provided the initial cell. Do existing persons have the right to exercise such a level of control over the genetic destiny of a new individual?

Concern also exists that human cloning might undermine family relationships. Commitments to both the unitive and the procreative functions of human sexual relationships might be diminished. For example, the questionable practice of using a gestational surrogate may, at times, be considered. The use of a donor cell from an individual other than the married couple may introduce problems of relationships and responsibilities.

An additional major risk is that cloning could lead to expedient uses of those who are cloned, with their value assigned primarily on the basis of their utility. For example, there could be a temptation to clone individuals to serve as sources of transplantable organs. Others have worried about the deliberate creation of subservient individuals whose autonomy would be violated. Egotistical or narcissistic individuals might be inclined to use the technology in order to "duplicate" themselves.

Finally, the financial costs of cloning would likely be considerable even after significant technological improvements. If human cloning were commercialized, conflicting interests might add to the risk of abuse.

While this is only a partial list of potential risks and misuses of human cloning, it should be sufficient to give pause to Christians who wish to apply the moral principles of their faith to the matter of human cloning. Still, it is important that concerns about the abuses of a technology not blind us to the possibility of using it to meet genuine human needs.[1] The possibility of human cloning, even if remote, motivates this statement of relevant Christian principles.

The following ethical principles are intended to apply to somatic cell nuclear transfer if that technology is ever applied to human beings. The rapid pace of progress in this field will require periodic review of these principles in light of new developments.

1. *Protection of vulnerable human life.* Scripture is clear in its call to protect human life, especially those lives that are most vulnerable (Deut 10:17-19; Isa 1:16, 17; Matt 25:31-46). The biological technology of cloning is ethically unacceptable whenever it poses disproportionate risk of harm to human life.

2. *Protection of human dignity.* Human beings were created in the image of God (Gen 1:26, 27) and were thus endowed with personal dignity that calls for respect and protection (Gen 9:6). Cloning may threaten human dignity in a number

Please turn to page 8

Statement on Ethical Considerations, continued…

of ways and must thus be approached with resolute moral vigilance. Any use of this technology that undermines or diminishes the personal dignity or autonomy of human beings must be rejected. This moral prohibition applies to all human cloning that would value human life primarily for its utilitarian function or commercial value.

3. *Alleviating human suffering.* It is a Christian responsibility to prevent suffering and to preserve the quality of human life (Acts 10:38; Luke 9:2). If it is possible to prevent genetic disease through the use of somatic cell nuclear transfer, the use of this technology may be in keeping with the goal of preventing avoidable suffering.

4. *Family support.* God's ideal plan is for children to develop in the context of a loving family with the presence, participation, and support of both mother and father (Prov 22:6; Ps 128:1-3; Eph 6:4; 1 Tim 5:8). Any use of somatic cell nuclear transfer as a means of assisting human reproduction should thus be within the context of the fidelity of marriage and support of stable family life. As with other forms of assisted reproduction, the involvement of third parties, such as surrogates, introduces moral problems that are best avoided.

5. *Stewardship*. The principles of Christian stewardship (Luke 14:28; Prov 3:9) are important for all types of assisted human reproduction including the possibility of somatic cell nuclear transfer, which is likely to be very costly. Married couples seeking such assistance should consider the expenses involved in terms of their exercise of faithful stewardship.

6. *Truthfulness*. Honest communication is one of Scripture's mandates (Prov 12:22; Eph 4:15, 25). Any proposed use of cloning should be informed by the most accurate information available, including the nature of the procedure, its potential risks, and its costs.

7. *Understanding God's creation*. God intends for human beings to grow in their appreciation and understanding of His creation, which includes knowledge regarding the human body (Matt 6:26-29; Ps 8:3-9; 139:1-6; 13-16). For this reason, efforts to understand the biological structures of life through ethical research should be encouraged.

Given our present state of knowledge and the current refinement of somatic cell nuclear transfer, the use of this technique for human cloning is deemed unacceptable by the Seventh-day Adventist Church. Given our responsibility to alleviate disease and to enhance the quality of human life, continued appropriate research with animals is deemed acceptable. ■

[1]There may be future situations in which human cloning could be considered beneficial and morally acceptable. It is possible, for example, to imagine circumstances in which cloning may be contemplated within the context of marriage as the only available means of reproduction for a couple who cannot participate in normal procreation. In other cases, potential parents may be carriers of defective genetic alleles, and they may wish to avoid the risk of giving birth to a child with a genetic disease. The use of somatic cell nuclear transfer might assist such parents in having a child who would be free of genetic disorder. Of course, many of the concerns about personal identity and dignity would still remain even in the context of family fidelity. As with other forms of assisted human reproduction, potential blessings of somatic cell nuclear transfer must be weighed against the risks.

Honoring the Religious Impulse Within the Arena of Genetic Counseling

Diana Fritz Cates, PhD
Associate professor, department of religious studies
University of Iowa

Human beings are extraordinary entities. Part of what makes us unique—and uniquely valuable—is that there is a religious dimension to our humanity, which includes a religious impulse. The religious impulse reveals itself in a breathtaking variety of ways within different people, at different stages of life development and history, and within different social and cultural contexts. To identify and critically examine these diverse manifestations is a principal task of religious studies. I begin with a situated and highly circumscribed account of the religious impulse, which is intended to set up some reflections concerning how a respectful medical care provider might honor this impulse, particularly within the context of genetic counseling. For our purposes, "to honor" is synonymous with "to feel and show respect."

The religious impulse

Most of us have *some* propensity to wonder and care about what is *really* going on in the universe and our own lives. Some of us intuit

Please turn to page 9

that there is more to reality than meets the eye of modern science, even though we might not know how to think or talk meaningfully about this "more." Some of us wonder, for example, about whether there is a higher power at work in the world, making a difference in the way things unfold. We wonder what, if anything, such a power has to do with us. Indeed, we may wonder why we are here, in the thick of *these* lives, and whether there is something in particular we ought to be doing in the time we have left. Some of us wonder what will happen to us when we die, whether some part of us will continue to exist after the body dissolves into its material elements. We may wonder whether there is a part of us now, in our present state, that is not ultimately reducible to complex material causes. What is it that makes us who we are, and what do "we" contribute to our own actions? We wonder about such things partly because we want to live decent and satisfying lives. As John P. Reeder Jr. writes, we want to "secure our good as well as possible," and we suspect that, "only by penetrating to the heart of things can we do that."[2]

> *"The most beautiful emotion we can experience is the mystical. It is the source of all true art and science. He to whom this emotion is a stranger, who can no longer wonder and stand rapt in awe, is as good as dead."*
> *—Albert Einstein*[1]

Most of us want to connect in a meaningful way with what is really real[3], and not only with what is apparently real. We may not conceive our longing in such terms. Most of us have limited occasion and facility for thinking explicitly about the fundamental nature of reality. But we need not be professional theologians or philosophers to experience the arousal of a powerful existential question that pulls us into further, related questions and concerns, leaving us unsatisfied with formulaic answers. Sometimes we feel overwhelmed by what is beyond our comprehension. Sometimes we feel compelled to look closer, dig deeper, or reach higher for a more complete view of things.[4]

All of us have a religious impulse[5], but we experience and express it in a wide variety of ways. Some channel it into traditional forms of religious belief, practice, and belonging. We may participate in a tradition because it promises to help us realize a liberating relationship to what is most important in the universe. The religious impulse can be channeled into other forms as well, though many of these are not religious in a narrow sense. That is, they are not tied explicitly to teachings and practices that are associated, in our cultural imagination, with particular faith communities. The religious impulse can be directed, for example, into the production or enjoyment of the arts. Our wonder and longing may find expression in writing poetry or reading novels or engaging in some other activity that lifts us out of our ordinary lives and into the power of an imagination that reinfuses the ordinary with the extraordinary, with "soul."[6]

The religious impulse can also be poured into scientific inquiry. Scientist Ursula Goodenough, a self-avowed "non-theist," writes in *The Sacred Depths of Nature*, of the "covenant" that she has formed with "Mystery."[7] "Mystery," she says, "generates wonder, and wonder generates awe. The gasp can terrify or the gasp can emancipate. As I allow myself to experience cosmic and quantum Mystery, I join the saints and the visionaries in their experience of what they called the Divine…"[8] And many of us know well that the religious impulse can also be directed into the medical arts. Many medical professionals are drawn to people who are in medical crisis—people who are suffering and, perhaps for that reason, are wondering what it really means to be whole. Being with people who ask these questions allow us to keep asking them ourselves. The open-hearted believer, the person of soulful creativity, the scientist who is fascinated with the fact that things work as they do, and the medical care provider who stands in awe at the edges of life and death all experience something remarkable. They each want, in their own way, to draw closer to the truth of life, closer to what is most worthwhile.

Some of us feel fully human, and even more-than-human, when we are in the grip of religious wonder and concern. At the same time, the religious impulse can make us feel ill at ease. I imagine that this impulse is ignored, repressed, or suppressed, at least some of the time, by most of us. Commonly it is channeled into activities that look promising in that they give the religious impulse constructive form and expression; but somehow we end up participating in these activities in ways that imprison the impulse, and keep it from being a fully conscious impulse that continually exceeds the limits that we place on it.

It is particularly tempting to suppress the religious impulse when it threatens to raise questions about the current state of our lives. Am I living my life meaningfully? Or am I mostly drifting, going through the motions from day to day, running from one form of busy-ness to another, trying to avoid some obscure pain that hovers on the periphery of my awareness?

Please turn to page 10

Many of us entertain questions about the truth of our lives only when we have to—when the pain catches up to us and overcomes us, and something within us demands an explanation. And many of us entertain such questions only as *long* as we have to, preferring to divert our attention as soon as the pain subsides.

Many of us tremble at the opening of the mind and heart to the sorts of questions that leave us with more questions. To pursue the truth of our lives is ultimately to pursue the ever-receding horizon of our wonder and concern. This pursuit *can* lift us out of our immediacy and provide us with a new perspective on life, but this very prospect may elicit fear and dread. Approaching a limitless horizon, turning around, and looking back, we may discover that for years, indeed for most of our lives, we have been ignorant, misguided or deluded about what matters most.

Awakening to the religious impulse can be unsettling. It is not surprising that many of us instinctively eschew it. But I think that most will acknowledge that our lives are richer and more satisfying when we attend to this impulse, remain conscious of it, and give it a flexible form worthy of it. If we wish to be fully alive—to live well as distinctively *human* beings—we must find workable ways to awaken to this impulse ourselves and to welcome the awakening of others.

Respect for persons

The religious impulse is part of what makes possible a life of wonder, transcendence, and reflective longing; hence, it commands immense respect. *Persons* command respect partly by virtue of the fact that each of us has an impulse to seek a more meaningful and satisfying connection to what is most real (even if we also struggle against this impulse and sometimes wish it would go away). Of course, persons command respect for other reasons as well, and exercising respect for persons involves more than honoring their religious impulse. But I want to focus on the relationship between respect and the religious impulse.

Most medical professionals recognize that they are bound by a principle of respect for persons. But they may not have considered that part of what they are bound to respect is persons *in their religious dimension*. Traditional approaches to medical ethics generally do not call attention to this dimension of personhood. A principle-based approach tends to construe respect for persons primarily as respect for autonomy, and it neglects to indicate what autonomy has to do with the religious impulse. Actually, the two have a lot to do with each other. For example, exercising autonomy involves making choices that reflect considerable moral understanding. It requires discerning the goods that are at stake in a given situation, and determining how much each of these really matters relative to the others. This requires reflection about what is truly worthwhile, and ultimately real. To respect a person is thus, in part, to protect and promote their ability to entertain forms of reflection that are rooted in the religious impulse.

Now I want to press beyond a principlist approach to consider respect, not simply as a principle-governed act, but as a moral excellence, a virtue.[9] From the perspective of virtue ethics, respect is a habit of character that disposes us to act and to feel consistently and reliably in certain ways, when we are in the presence of persons. Respect disposes us to perceive that all persons have profound unfathomable interest and value, by virtue of the fact that they have certain capacities or potentialities. Most notably, for our present purposes, we who are persons have the capacity, on account of our religious impulse, to be gripped by a question or captivated by a concern that yanks us out of our immediacy and propels us beyond our present understanding of things, causing us to wonder and care about why things are the way they are, and what it all means for us. Respect disposes us to watch for, notice, and stand at attention before the religious impulse, as it is revealed and also hidden within the thoughts, desires, words, and actions of persons. A respectful person goes so far as to posit this impulse when it seems that a particular individual or community is dead to it or, perhaps, running from it.

What would it be like, more concretely, to be the sort of person who consistently honors self and others by acknowledging the impulse to understand and connect with what is most important in reality? I want to pursue this question with reference to the arena of genetic counseling. This is a context within which agonizing religious questions and concerns arise, and one in which such questions are bound to arise with greater frequency the more we are challenged by the new genetics. Ultimately, though, I would argue that much the same *moral* work is required of all of us. All of us are likely at some point to be personally affected by our own or someone else's problematic genetic information, and we need to consider how to respond.

Honoring the religious impulse

As you know, people consult with genetic counselors primarily because they need to know certain things. They need to obtain genetic information that has been gathered in a highly reliable manner, following the rules of good science or the standards of evidence-based medicine. They need to know, for example, whether they have a suspected genetic mutation, what the chances are that this mutation will result in a particular condition, and whether there is a cure or an effective treatment for that condition. Will a child, a developing fetus, an early embryo, or their germ cells have certain muta-

Please turn to page 11

tions? People with genetic concerns need answers to these and dozens of other questions that are within the purview of science, medicine, and statistics.[10]

People need to know the scientific information that is relevant to their genetic situation, but many of them also want to understand what this information *means*. It is one thing to grasp, like a textbook description, the conditions or processes to which certain medical and scientific terms refer. Similarly, it is one thing to grasp the meaning of a set of genetic statistics and some patients also desire at least some of this understanding. But there are other forms or additional layers of understanding—layers that are deeper, more personal, or closer to the heart. A patient may want to understand what it means for her to be *this* relationally embedded person who faces (or has been spared) *this* unusual set of constraints on *her* present and future possibilities. She may want to bring the abstract medical facts and statistics of her case into an integral relationship to her evolving understanding of who she is and who she can reasonably hope to become.[11]

Questions of profound significance are likely to arise when someone longs for this sort of understanding. These are questions for which genetic counselors must be prepared. One question that is likely to arise is, "Why?!" A counselor informs a patient that she has a mutation that is likely to manifest itself as a debilitating genetic disease, and the patient asks, "Why is this happening to me?" This question may spill into the related question, "What did I do to deserve this?" A counselor who believes that scientific explanations provide the best answers to the most important questions may be inclined to assure the patient that the occurrence of this mutation was simply a random event; an impersonal event governed by nothing more than the laws of genetics and cell biology.[12] From the point of view of scientific materialism, such may be true or highly likely. (Scientific materialism is a metaphysical view according to which the causes and constituents of all existing things are material).[13] But most people do not live within the constraints of a decidedly materialistic world view—at least, not one that is dead to what Einstein calls the mystical.

Many people believe that the world is alive with spiritual power, even though they might be hard-pressed to say what they mean by that. They think that there are immaterial forces, subtle energies, or other causal factors that are hidden from plain view, but can nonetheless make a difference in the way things go. It is possible that some day what is commonly regarded as spiritual will turn out to be material in some sense. Some scientists are now seeking to prove that encounters with divine reality are ultimately reducible to chemical or electrical phenomena within the brain and neural system. In any case, many people believe that things unfold as they do partly because of causal factors that are not presently subject to measurement scientifically. They believe that perceiving these causal factors requires the development of various forms of intuition. For those who prize their intuition and use it to perceive dimensions of reality to which they think others are oblivious, a purely genetic explanation for the occurrence of a genetic event will likely be regarded as partial and perhaps obtuse. There must be other factors involved, a more fundamental cause, a more complete story.

Consider, for example, a patient who is struggling with feelings of guilt. Her baby has been born with a debilitating mutation for which there is no family history, and she reasons that because the baby came from her body, she must somehow be responsible for its condition, even though objectively it appears that she did everything by the book during her pregnancy. Chances are, when she ponders why this is happening to her, she will worry vaguely that there is something wrong with her; there is something hidden and hideous manifesting itself in this extension of her body (her baby). She may wonder if there are supernatural powers at work in her life, trying to get her attention or punishing her for some past mistake.[14] Or she may wonder if she is in some other respect out of sync with what is most important in the universe. From a philosophical point of view, it may be that what such a person experiences, as she ponders these and other possibilities, is not well-characterized as "guilt," unless she freely and knowingly, or negligently, committed an act that had the foreseeable effect of injuring her future baby. But "guilt" is a label that comes to mind often when people try to identify how they feel about something bad that has occurred in loose conjunction with something they have done or left undone.

A genetic counselor may want to ease this woman's suffering by saying, "The one thing that I can tell you for sure is that you did not do anything wrong; there's nothing you did to cause your child to be born with this disease. This was simply an accident." Such a comment may be well-intentioned, and it may be welcomed by some patients. But it is important to consider the possibility that this woman is agonizing, not about the proximate material causes of her baby's condition, but about something that is, for her, more significant, namely, the *ultimate* metaphysical causes or reasons for why this terrible thing has happened, and why it has happened to her, of all people. Granted, such existential agony can be unbearable. Sometimes a wise and compassionate counselor will determine that his or her patient is in serious mental health danger, so that certain self-lacerating or disorienting questions need to be quieted for a time, if possible. But this agony, in another individual and situation, can be very valuable. The pain—and the desire to resolve the pain—can stimulate a form of reflec-

Please turn to page 12

tion that extends a person's capacity to live meaningfully and with contentment.

The woman in our example may at some point reach the conclusion that she did not do anything to cause her baby harm, and she has nothing to feel guilty about; the event was simply an accident. She may arrive at this conclusion, however, only after she has wrestled with some of her most cherished beliefs—for example, the belief that there is a providential power at work in the world, causing events to occur according to a divine plan, or the belief that there is a supreme judge who metes out rewards and punishments according to a standard of cosmic justice, or the belief that, in a world governed by karmic principles, there are no accidents. It can be tempting to seek to assuage someone's painful religious concerns as quickly as possible; but doing so can stifle a questioning process that has the potential to propel a person into new levels of transcendent awareness and transformation.

Closely related to the question of "Why?" is the question of "What am I going to do?!" For many people, whatever happens, happens for a reason. The reason commonly relates to the will of God or the gods, to the presence of angels, guides, or other spiritual or ethereal entities, or to the underlying structure of the universe. When someone cries out in a counseling session, "What am I going to do?" it could be that she does not understand the factual information provided, feels incapable of understanding it, and thus feels unable to make a decision based on that information. But it could also be that she understands the information, at least on the level of science and statistics, and she wants to make an informed choice, but she intuits that an informed choice must be based partly

Please turn to page 13

2003 contributors to the Center for Christian Bioethics

Thank you to all who gave.

Donald and Sharpm Ammon
Bruce and Audrey Anderson
John and Anne Anholm
Dena Carlota Arellano
Dalton and Barbara Baldwin
James and Cynthia Bandy
Robert Barker
David and Colleen Baylink
Geneva Bendelius
Charles and Bonnie Bensonhaver
Douglas Eugene Bertleson
Joseph and Marilyn Billock
Chris and Constance Boskind
Michael and Diane Boyko
Allen and Rosenell Brandt
Floyd and Mary Brauer
Jerome and Lois Bray
Philip and Delissa Broeckel
Marilyn L.S. Brown
Albert Brown
Peggy Bryson
Frank and Beth Buchanan
Stanley and Marjorie Bungard
Larry and Nancy Bunn
Mark F. Carr
Steve and Marit Case
Helen Childs
George and Nannette Chonkich
Douglas Clark
Ramona Clark
Vann Dudley and Lynda Cockrell
Keith and Judy Colburn
Luis G. Collazo
Fred Cornforth
Daniel and Marilyn Cotton
Marvin D. and Amorat Covrig
Marilyn Crane
S. Cromwell Crawford
Raymond and Elizabeth Crawford
Frank Souza Damazo
Joshua Woo Dee
James and Kathryn Dexter
Elwin and Beth Dunn
Paul William and Yvonne Dysinger
Harvey and Eleanor Elder
Dan and Linda Engeberg
Dwight and Helen Staples Evans
John and Virginia Evans
Harold and Eleanor Fanselau
Betty Farley
Galen and Suzanne Fillmore
Richard and Claudia Flaiz
Blaine A. Fowler
Gary and Sharon Fraser
Gary and Annette Frykman
Frank and Lynn Gasper
Lloyd Edward Gauntt
Fekede W. and Azeb Gemechu
Lawrence T. and Gillian Geraty
Daniel W. and Sarah Giang
George and Carol Gibson
Jon and Marylois Gibson
Richard and Gwen Gingrich
Janine Goffar
James and Arlene Gruber
Richard and Kathlene Guth
Ronald C. Hansen
Steven Hardin
Richard H. Hart
Mark and Carol Haviland
Healthcare for Business and Industry
Lynn and Margaret Heath
Douglas Hegstad
William Heitsch
Joyce Wilson Hopp
Robert Horner
Rendel Ramsey Houston
Les T. Jacobs
Christopher and Melanie Jobe

on an understanding of how things presently stand with respect to some deeper-than-ordinary dimension of reality. Hence, she may be looking for religious, as well as moral guidance, perhaps from the counselor, but more likely from some other relevant source. She may be looking for help in discerning the nature, the movement, or the intention of what is most real. When it comes to making life and death decisions, many people want to locate themselves relative to a path that transcends mere custom or personal preference. They worry that the consequences of their decisions might adhere to them in some way beyond the grave, and they do not want to mess things up forever.

Some of us may not realize how many people think of personal crises as tests, sacred invitations, or special opportunities of some other kind that come from some mysterious realm. For many people who think this way, a lot rides on their responses. Whether or not they manage to align themselves with what is most real and most powerful could effect their eternal destiny—and perhaps the destiny of others. For many patients, "What am I going to do?" (like the question of "Why?") is thus a religious as well as a moral question. It expresses a desire to find oneself and secure one's good relative to something of fundamental importance.[15] Once we understand this, we can appreciate how crucial it is for genetic counselors to reflect carefully on their usual verbal responses, facial expressions, and body language.

Practicing the virtue of respect

To return to the idea of respect, my thesis is that respecting oneself and others within the genetic counseling arena is partly

Please turn to page 14

Gordon and Dorothy Johns
Arthur Johnson
Robert and Odette Johnson
George Isaac Kafrouni
Eldyn Karr
Gerald King
Noel and Barbara Kirkby
J. Mailen and Lynne Kootsey
Bernhard A. Kopfer
Edwin and Beverly Krick
Irvin and Doreen Kuhn
John Richard and Helen La Gourgue
David Larson
Virgil and Ellen Lau
Robert and Carol Leach
Carla Renee Lidner
R. Lindsey and Stona Lilly
Charles and Rae Cason Lindsay
Carl and Evangeline Lundstrom
Theodore and Linda Mackett
Melvin Mayer
William and Julie McGhee
Warren and Brenda McGuire
John and Julianne Melnick
Ronald and Irene Miller
Lillian Miller
Robert and Gladys Mitchell
Robert Eugene and Jacqueline Moncrieff
Michael R. and Janice Moreno
Heather Morrison
William G. C. Murdoch Jr.
Kenneth and Rebecca Nelson
David Walter and Dena Nelson
James and Adele Nelson
T.C. Nelson Jr.
Darrell and Sonja Nicola
Donald and Lynn Nicolay
Jarl Calmar Nielsen
Robert and Joyce Orr
Barbara Orr-Willey
Keshab Pant
Richard and Bonnie Parker
Giglia Parker
Carl and Shirley Pinterich
Charles D. Potter
Wayne E. Pundt

Johnny and Clara Ramirez
Robert and Judith Rausch
Douglas E. and Barbara Rebok
Ronald Reece
David and Sandra Reynolds
Joseph Dwight Riederer
E. Arthur and Debi Robertson Jr.
Dorothy M. Rumble
Leona G. Running
Elmar and Darilee Sakala
Gerald Stanley Schoepflin
Ronald and Louise Scott
Myren and Connie Severin
Reginald and Margaret Sherrill
J. Barry and Joan Siebenlist
Charles and Dorothy Simmons
Louis L. and Marguerite Smith
Richard and Alice Spindler
Brent Stanyer
Gail and Virginia Stevens
Donald Leslie Stilson
John and Lyle Marie Stockdale
James Cedric and Jamie Szana
W. Leonard and Carlene Taylor
David and Maxine Taylor
Betty Thacker
Walter Carroll Thompson
Ralph and Carolyn Thompson
Bernard Tilton
Ada L. Turner
Richard and Gwen Utt
Lois Van Cleve
Prasit B. Vassantachart
Fred and Renie Veltman
Raymond Lawrence and Colleen Vercio
Kenneth and Betty Vine
John and Nancy Vogt
C.H. Walters
Donald and Joyce Webster
James and Betty Webster
Dorothy Weisz
Leslie and Sarah Werner
James Monroe Whitlock
David W. and Connie Wilbur
Rodney and Barbara Willard
Robert Williams
Kenneth and Carolyn Wilson
Gerald and Betty Winslow
Warren Witt
Beverly D. Wombold
Richard K. Wonderly
Douglas S. Wong
Lester Wright

a matter of being disposed to take seriously the idea that every person who comes to one's office has an impulse to wonder and to care about what is ultimately real, true, and good. This impulse may be inchoate or evident, but contained in a highly circumscribed and rigid form; a person may be unaware that the way she has sought to give expression to her concern up to this point is not adequate to her concern. Nevertheless, the impulse is of tremendous significance. A respectful counselor believes that each patient has the potential to experience an increasingly conscious inner demand to reach with passion and imagination beyond the events of life toward *something* that lies beyond or behind these events, and makes their meaningful interpretation possible.[16] A respectful counselor looks for this potential, hopes for its further actualization, and stands in awe before its power to transform life.

Feeling and showing respect could involve something like taking an interest in a patient's effort to find the words to express her anger at God or the universe. It could involve saying, "the concerns that you have expressed are important concerns. Can you think of someone who might be able to help you explore them further?" From the perspective of virtue ethics, however, the important thing is not that we try to specify ahead of time exactly what should be said to what sorts of patients, in what kinds of cases. The virtue of respect cannot be exercised apart from the context-sensitive exercise of practical wisdom. (Practical wisdom is a disposition to deliberate well about what action is most likely to promote human flourishing, in any given case.)[17] Each situation is unique in important respects. It is not possible to account for all contingencies in advance of a unique predicament. Hence, principles and rules can be helpful in guiding thought and focusing attention, but cannot substitute for good habits of perception, discernment, and emotional attunement. What is best for one patient is not necessarily best for another. Moreover, each genetic counselor is different and can excel in different ways; each may be called upon to exercise a somewhat different configuration of moral powers.

The ideals that a genetic counselor formulates for his or her own professional moral demeanor and behavior may therefore differ from their colleagues. Nonetheless, what counts as a morally fine response to a particular patient, in a particular situation, is not completely open; it is not completely morally relative. Each of us is required to be respectful in our encounters with persons; each of us is constituted as a relational being in such a way that we can flourish only inasmuch as we are respectful; and there are limits to what can reasonably be considered respectful. The morally good response is not totally relative, but again, it *is* context sensitive.

Because the particulars of a situation matter in determining what counts as a morally good response, we cannot say a lot more, specifically, about what virtuous respect will look like in the genetic counselor's office. However, the approach of virtue ethics does allow us to say a bit more about what a respectful counselor will probably *not* say and do. Given that respect is a virtue that orders dispositions to feel, as well as to act, the approach of virtue ethics also allows us to indicate roughly how a respectful counselor will probably *not* be inclined to feel. That is, it is possible for us to approach the idea of a respectful response—what Aristotle referred to as the "mean"[18]—by identifying some responses that are likely to be "extreme" in most cases. Traditionally, a virtuous response is defined with reference to an extreme of excess and an extreme of deficiency.[19]

Marking out the extremes of excess & deficiency

When thinking about the virtue of respect, keeping our focus on only one dimension of respect, respect for persons in their religious dimension, it is difficult to imagine an extreme of excess. Perhaps we could think of someone who errs in the direction of excess as someone who has such a profound sense of someone's inestimable value that he or she mistakes the person for a god or is paralyzed at the thought of making a mistake in his or her encounter with the sacred depths of the other's personhood. But by far the most common ways of missing the mark in feeling and expressing respect involve feeling too little of it, too infrequently, and speaking and acting in ways that express this failure. There are many different ways in which one can err in the direction of deficiency, but it will suffice for our purposes to consider a few.

A genetic counselor can fail in the direction of deficiency by consistently failing to notice when a patient's religious impulse has been aroused. Failing to encounter patients in their religious dimension, a counselor who lacks respect ignores religious questions, as if they had never been voiced, as if they had no meaning, say, within the world of science. Or a counselor hears the questions, but effectively dismisses them, for any number of reasons, acting as if they were not worth serious consideration.[20] A counselor may even dismiss such questions and concerns with scorn, believing that people whose questions and answers reach beyond scientific explanations are deluded, uneducated, or juvenile. He or she may not express this scornful dismissal directly, but to fall short of virtuous respect, it is enough to think and feel this way about one's fellow human beings. It is not disrespectful to disagree with a patient's conception of reality or the good. However, it can be disrespectful to express this disagreement within a counseling session, or to express it in certain ways. It is almost always disrespectful simply to dismiss someone's conception, rather than appreciating that the patient is trying to access a stable source of meaning or to construct more meaning than is presently

Please turn to page 17

available to him or her.

Another way of erring in the direction of deficiency is to acknowledge that every person has a religious impulse, but then to insist that one's patients raise ultimate questions and expose their painful human longings, even when they are not ready or willing to do so. It may be appropriate to give a particular patient a nudge, following certain cues, hoping that her autonomy will be enhanced if she gains a more adequate understanding of her situation, which again may require that she become more aware of the ever-receding horizon of that understanding. However, a respectful person is not inclined to push. Respect generally disposes one to realize and accept that persons open profitably to existential questions and longings when they are ready to do so—not according to another's wish or demand.

A counselor can err in the direction of deficiency also by trying to manipulate patients into a particular form of questioning, framed by a particular religious (or anti-religious) narrative or philosophical world view, believing that the counselor's own path is the only path along which patients could find compelling formulations of—and answers to—their questions. There is nothing inherently disrespectful about believing that a particular path is true. Nor is there anything inherently disrespectful, in general, about proclaiming one's commitment to that path. But it is easy to imagine genetic counseling situations where making such proclamations would be, for a variety of reasons, inappropriate. Whether and in what way it is fitting for a counselor to participate in tradition-specific, faith-based conversations with their patients depends on many factors, including the kind of institution involved, the expectations that have been generated by the ways that the institution represents itself, and the stated desires of patients. However, it is generally a failure of respect to insist against someone's judgment and inclination that he or she follow the same path as oneself, particularly when the likely effect of one's insistence is to stifle, rather than promote, creative and critical inquiry into the truth of life. A respectful genetic counselor is prone to remain open and attentive to the religious impulse, but he or she is not inclined to demand that this impulse appear in or on the counselor's own time or terms.

Conclusion

I haven't really offered arguments for these specifications. I cannot do so without offering a much fuller treatment of respect and other virtues. But this provides a basis for discussion. I acknowledge that there are many problems and perplexities that arise when one tries to define the religious impulse, and when one tries to specify what it means to respect it, particularly when one attends (as I have not) to some of the troubling forms that this and related impulses can take. I have yet to sort through all of these questions myself.

In closing, I anticipate that some genetic counselors will want to avoid the moral struggles, complexities, and expenditure of time and energy that are involved in cultivating the dimension of respect on which we have focused attention, namely, the disposition to honor the religious impulse. Some may prefer to institute a practice of referral as a standard response to obvious manifestations of the religious impulse. For certain patients, referral to relevant clergy will be appropriate and easy to make, but this general strategy will fail to meet the needs of many. First, being concerned to contain a patient's religious questioning and longing so that it can be unbottled elsewhere may truncate the sorts of conversation that are necessary for making good referrals. Second, the religious impulse is present and evident in many people who have no effective relationship to a recognized religious tradition. How does one refer a patient who asks broadly religious questions, but has no interest in—and may even have some animosity toward—mainstream organized religions? Third, the religious impulse is evident in many who have a strained relationship with a tradition that may or may not be nurturing their religious impulse. How does one refer a patient whose medical crisis has aroused questions that his or her own tradition does not permit to be raised?

In posing these questions, I am not suggesting that a genetic counselor handle the religious dimensions of the counseling situation all by her or himself—this may or may not be appropriate, depending on many factors, including the counselor's training, and the presence of competing obligations that limit time and resources. I am suggesting, instead, that determining where, if at all, to refer a patient requires first encountering the patient as a person, standing in awe before the power of his or her religious impulse, and seeking to acknowledge it in some way.

Figuring out how best to do this is not a simple matter. It requires choosing to be a person who is actively engaged in the cultivation of virtue, not only at home, but also at work, where most of us spend half of our adult waking lives. It requires pursuing moral excellence, not in isolation, but as a participant in various friendships and communities that encourage broadly religious and moral reflection and discourse. As those who provide genetic counseling extend their personal and professional conversations to ponder the ways that the religious impulse makes its appearance in their offices, and as counselors share with each other how they have both succeeded and failed in honoring this impulse, they will deepen their participation in existing moral traditions, and will develop new professional moral traditions that can guide and inspire the ongoing cultivation of respect. Only with a lot of practice can genetic coun-

Please turn to page 16

selors, other medical care providers, and the rest of us hope to develop the moral habits that are essential to reliably good decision making.[21] ■

[1]Albert Einstein, *The World As I See It* (New York: Philosophical Library, 1934), quoted in Ursula Goodenough, *The Sacred Depths of Nature* (New York: Oxford University Press, 1988), 100-1.

[2]John P. Reeder Jr., "What is a Religious Ethic?" *Journal of Religious Ethics* p. 164. I am grateful to Professor Reeder for extensive conversation on "the religious" in conjunction with his fall 2002 University of Iowa Spalding Lecture, "Why are We So Confused about Religion?"

[3]See Clifford Geertz, "Religion as a Cultural System," in *The Interpretation of Cultures: Selected Essays*, 87-125 (New York: Basic Books, 1973).

[4]The symbolic language of Paul Tillich has had a significant impact on my way of construing "the religious."

[5]By "all of us," I mean "all of us who are hearing or reading this paper." Technically, most, but not all, genetically human beings have a religious impulse. To have a religious impulse, an embodied human being must have certain organs that are in reasonably good working order—organs that support various forms of thought, perception, imagination and intentional desire. For example, a week-old human embryo does not (yet) have a religious impulse.

[6]Thomas Moore, *Care of the Soul: A Guide for Cultivating Depth and Sacredness in Everyday Life* (New York: HarperCollins, 1992). This paper is undoubtedly informed by a visit that Thomas Moore made to the University of Iowa during the spring of 2002; during this visit, he gave several talks, including one on "Spirit and Soul in the Practice of Medicine: Addressing the Mysteries of Life and Death."

[7]Goodenough, 29. Jack Lilien drew my attention to Goodenough's work.

[8]*Ibid*., 13.

[9]For further reflection on the meaning of respect in medical ethics, see Cates, "Caring for Girls and Women Who Are Considering Abortion: Rethinking Informed Consent", in Diana Fritz Cates and Paul Lauritzen, eds., *Medicine and the Ethics of Care* (Washington, D.C.: Georgetown University Press, 2001), 162-203. Compassion (or care) is also an important virtue for medical professionals, but I focus on respect here because I have treated compassion elsewhere, and because too often respect is associated mistakenly with narrowly deontological approaches to ethics. For an analysis of the nature and value of compassion, see Cates, *Choosing to Feel: Virtue, Friendship and Compassion for Friends* (Notre Dame, Ind: University of Notre Dame Press, 1997).

[10]I do not mean to imply here that the patient is merely a recipient of information. As Janeta Tansey has called to my attention, information gathering is a process in which both patient and medical practitioner participate.

[11]Although "understanding" is widely recognized as part of the informed consent process, too little attention has been paid to the many dimensions of the relevant sorts of understanding. See Cates, "Caring for Girls and Women Who Are Considering Abortion: Rethinking Informed Consent," in Diana Fritz Cates and Paul Lauritzen, eds, *Medicine and the Ethics of Care* (Washington, D.C.: Georgetown).

[12]Charles Bosk, *All God's Mistakes: Genetic Counseling in a Pediatric Hospital* (Chicago and London: University of Chicago Press, 1992), 49-50. Bosk calls attention to the discomfort that many genetic counselors experience when their patients' concerns threaten to pull them out of their "comfort zone" of medical science and statistics. Kathleen Blazer, MS, CGC, assistant director of the City of Hope cancer genetics education program, has noted in conversation that genetic counseling as a profession is moving away from the medical model. Perhaps for this very reason, I expect that genetic counselors will face more and more ethical challenges that are posed by patients who long for more meaningfulness in their medical decision making. These challenges will need to be addressed as established genetic counseling training programs evaluate how they are currently preparing people to meet the demands of the profession, and as additional programs are developed.

[13]Dennis McCarthy puts it this way: "Materialism…is the antithesis to all bodiless power or inherent-ability theories. It is the ultimate mechanical 'billiard ball' theory, comprising the belief that all phenomena are the result of contact with objects that exist in three dimensions, and that the motion of matter results exclusively from collisions. Things happen because things collide. Everything that occurs, occurs because of this. Nothing else can happen. Nothing else can be." McCarthy, "Scientific Materialism: The Derivation of All Science from Newtonian Contact Forces" (*http://hometown.aol.com/Dennis2020/Index.html*).

[14]Bosk, 50-52.

[15]Reeder, 164.

[16]See Langdon Gilkey, *Naming the Whirlwind: The Renewal of God-Language* (Indianapolis and New York: Bobbs-Merrill, 1969), 253-5. This is true, I think, even if in one's searching one comes to the conclusion that there is nothing of this kind in the universe.

[17]For further inquiry into the virtue of practical wisdom, see Aristotle, *Nicomachean Ethics*, trans. Terence Irwin (Indianapolis, Ind.: Hackett, 1985), 1140a25-1140b10-1145a12.

[18]Aristotle, *Nicomachean Ethics*, 1106a15-1106b35. For further reflection on Aristotle's conception of virtue (and that of Thomas Aquinas). see Cates, *Choosing to Feel*.

[19]Rosalind Hursthouse raises good questions about the adequacy of at least certain interpretations of Aristotle's doctrine of the mean. In my view, with respect to most virtues, one can go to excess and fall short in many different ways, and these ways of missing the mark cannot be lined up along a single continuum. Hursthouse, "A False Doctrine of the Mean," in *Aristotle's Ethics: Critical Essays*, ed. Nancy Sherman (Lanham, Md.: Rowman & Littlefield, 1999), 105-119.

[20]Nondirectiveness is an important norm for genetic counseling, but counselors ought to consider whether certain forms of nondirectiveness express a failure to affirm the value of certain kinds of questions that aim at important dimensions of understanding on the part of patients.

[21]I have received helpful feedback on these ideas from many colleagues and students. Special thanks to John P. Reeder Jr., Christopher Mount, Thomas Lewis, Wendelin Guentner, Keith Green, Jordan Copeland, Janeta Tansey, Joan Henriksen, Nicole Taylor, and Rick Borchard.

Diana Fritz Cates, PhD, *is an associate professor in the department of religious studies at the University of Iowa. Dr. Cates is the author of the 1997 book* "Choosing to Feel: Virtue, Friendship, and Compassion for Friends." *Currently, Dr. Cates is completing her second book*, "Genetic Guilt: Genetic Information and Religious Emotion."

LOMA LINDA UNIVERSITY
Center for Christian Bioethics

LOMA LINDA UNIVERSITY
Center for Christian Bioethics
Coleman Pavilion, Suite 11121S
Loma Linda, California 92350

Change Service Requested

NONPROFIT ORG.
U.S. Postage
PAID
San Bernardino
California 92350
Permit No. 1272